HOWI 8000-U003 February 1, 1999

Responsible Office: Office of Life and Microgravity Sciences and Applications

Subject: Research Solicitation, Evaluation, and Selection



OFFICE WORK INSTRUCTION

RESEARCH SOLICITATION, EVALUATION, AND SELECTION

Original signed by:	
Beth M. McCormick	February 1, 1999
Deputy Associate Administrator, OLMSA	

HOWI 8000-U003 February 1, 1999

Responsible Office: Office of Life and Microgravity Sciences and Applications

Subject: Research Solicitation, Evaluation, and Selection

DOCUMENT HISTORY LOG

Baseline 02/01/99	
	· · ·

HOWI 8000-U003 February 1, 1999

Responsible Office: Office of Life and Microgravity Sciences and Applications

Subject: Research Solicitation, Evaluation, and Selection

1. **Purpose**

This OWI provides instructions for the planning and implementation of the science research solicitation and selection process utilized at NASA Headquarters (HQ) Code U for the Life Sciences Division and Microgravity Research Division. This process ensures quality support and selection of independently peer reviewed scientific research.

2. Scope and Applicability

This OWI applies to all scientific research solicitation processed for the Life Sciences Division and the Microgravity Research Division within the Office of Life and Microgravity Sciences and Applications (OLMSA). All commercial research flight planning is addressed in HQ/U/OWI 008.

3. **Definitions**

- 3.1 <u>Commerce Business Daily (CBD)</u>. A Federal Register announcement of an upcoming NASA Research Announcement (NRA), published by the Commerce Department in the document called the Commerce Business Daily.
- 3.2 <u>Conduct Scientific Peer Review</u>. The process that the NRA peer review contractor administers. The peer review contractor solicits participation of independent scientific researchers to review proposals submitted in response to NRAs, organizes their travel, takes notes on panel meetings, makes copies of scientific peer review analysis, and incorporates input into an overall scientific merit evaluation document. A mail review refers to a review conducted exclusively by ad hoc mail reviewers and does not involve a panel meeting. Mail reviews are sometimes used for unsolicited proposals that are not deferred to future NRAs. Unsolicited proposals may also be reviewed internally by Division staff if the Division Director deems this action appropriate. All recommendations for review of unsolicited proposals are put forward by the Enterprise Scientist for decision by the Division Director.
- 3.3 DD. A NASA Division Director.
- 3.4 <u>Engineering Cost Management (ECM) Review.</u> An engineering evaluation performed by a NASA Field Center when a proposal related to flight is being considered for selection.
- 3.5 <u>Human Exploration and Development of Space Enterprise Strategic Plan.</u> A document developed under the direction and authority of the Associate Administrators of the

HOWI 8000-U003 February 1, 1999

Responsible Office: Office of Life and Microgravity Sciences and Applications

Subject: Research Solicitation, Evaluation, and Selection

- OLMSA and the Office of Space Flight (OSF) detailing the goals and objectives of the Human Exploration and Development of Space (HEDS) Enterprise.
- 3.6 <u>NASA Strategic Plan</u>. A document defining the goals and objectives of NASA, under the authority of the Administrator.
- 3.7 NRA. A NASA Research Announcement.
- 3.8 Office of Life and Microgravity Sciences and Applications Policy on Review, Selection, and Support of Research. A document which defines the policy governing the mechanisms by which the NASA OLMSA solicits and selects research. This document was issued by the Associate Administrator of OLMSA to OLMSA staff in September of 1998.
- 3.9 <u>PI.</u> Principal Investigator.
- 3.10 <u>Process Proposals</u>. The process that the NRA peer review contractor performs. The proposals are received electronically or by mail. The peer review contractor categorizes the proposals according to research discipline, and sends an acknowledgment to the proposers. The peer review contractor then makes and sends copies of the proposals to appropriate members of the independent scientific peer review panel. He also files an office copy of each proposal. For unsolicited proposals, the Enterprise Scientist assesses the urgency, and either defers it to the next NRA cycle or initiates an in-house or mail peer review.
- 3.11 <u>Proposals.</u> Documents submitted by researchers to NASA requesting support for scientific research.
- 3.12 <u>Science in Air and Space: NASA's Science Policy Guide.</u> Guiding document from NASA's Chief Scientist on Science Policy including research solicitation issued in 1996.
- 3.13 <u>Unsolicited Proposals.</u> Documents submitted by researchers to NASA for support of scientific research without reference to a specific NRA.
- 3.14 <u>WWW.</u> The World Wide Web, i.e., the Internet.

4. Reference Documents

4.1 NPD 1000.1, NASA Strategic Plan (http://www.hq.nasa.gov/office/nsp/cover.html)

HOWI 8000-U003 February 1, 1999

Responsible Office: Office of Life and Microgravity Sciences and Applications

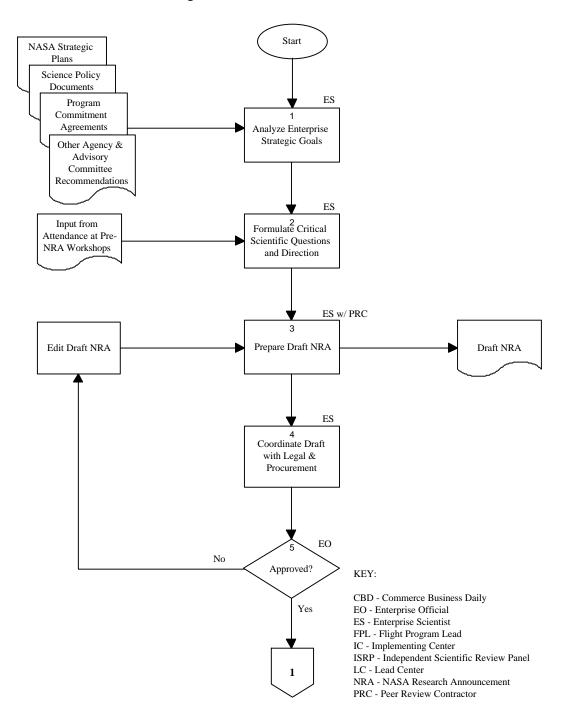
Subject: Research Solicitation, Evaluation, and Selection

- 4.2 Human Exploration and Development of Space (HEDS) Enterprise Strategic Plan, 1996 (http://www.hq.nasa.gov/office/nsp/heds.htm)
- 4.3 Office of Life and Microgravity Sciences and Applications Policy on Review, Selection and Support of Research, September 1998
- 4.4 Science in Air and Space: NASA's Science Policy Guide, 1996 (http://dlt.gsfc.nasa.gov/cordova/guide.html)
- 4.5 Draft Program Commitment Agreements (PCAs) for OLMSA Programs
- 4.6 Contract for the Peer Review Contractor

Responsible Office: Office of Life and Microgravity Sciences and Applications

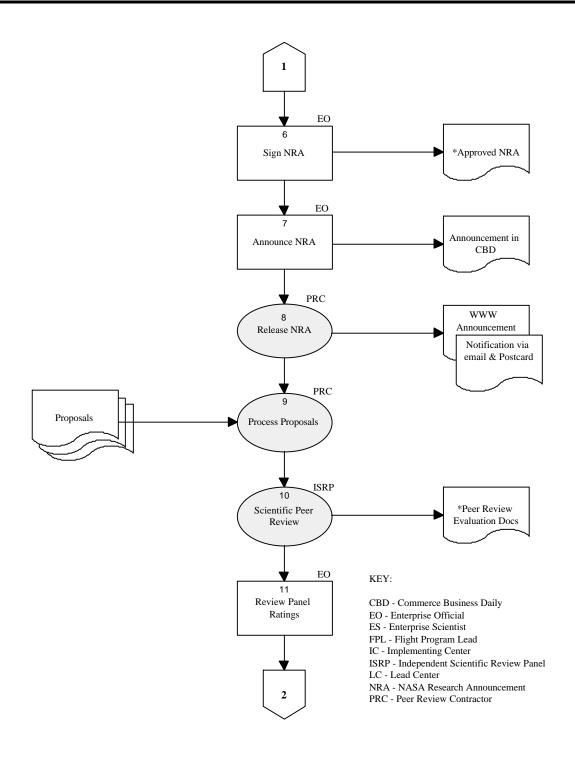
Subject: Research Solicitation, Evaluation, and Selection

5. Flowchart For Solicited Proposals



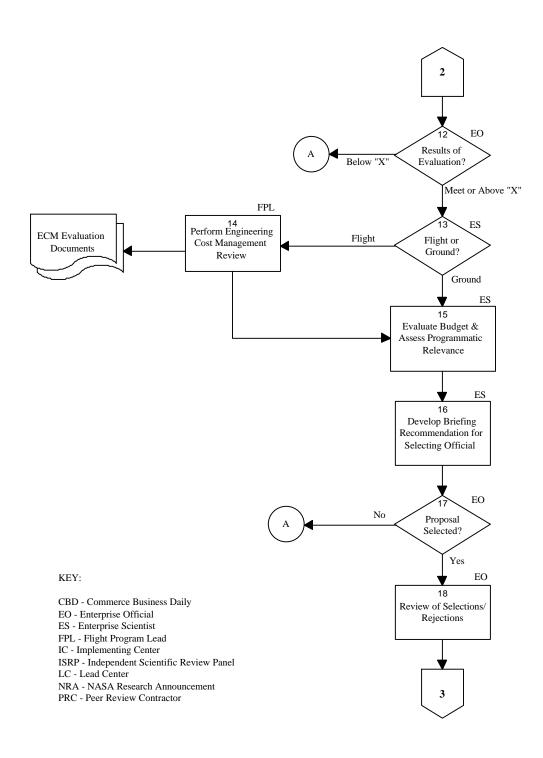
Responsible Office: Office of Life and Microgravity Sciences and Applications

Subject: Research Solicitation, Evaluation, and Selection



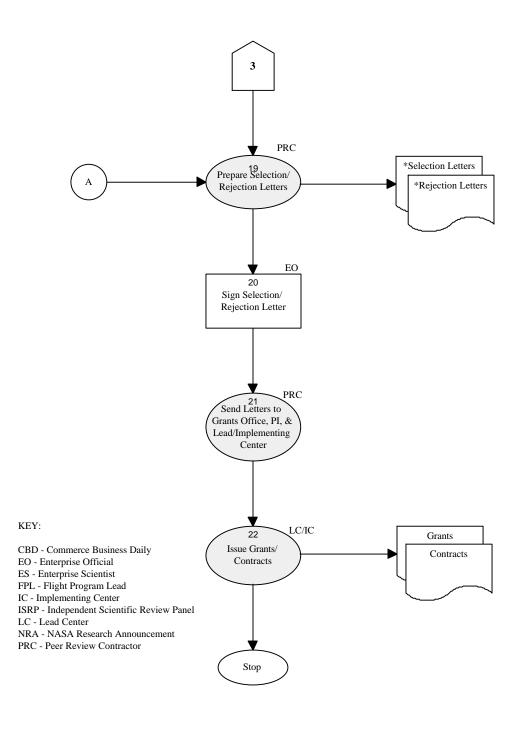
Responsible Office: Office of Life and Microgravity Sciences and Applications

Subject: Research Solicitation, Evaluation, and Selection



Responsible Office: Office of Life and Microgravity Sciences and Applications

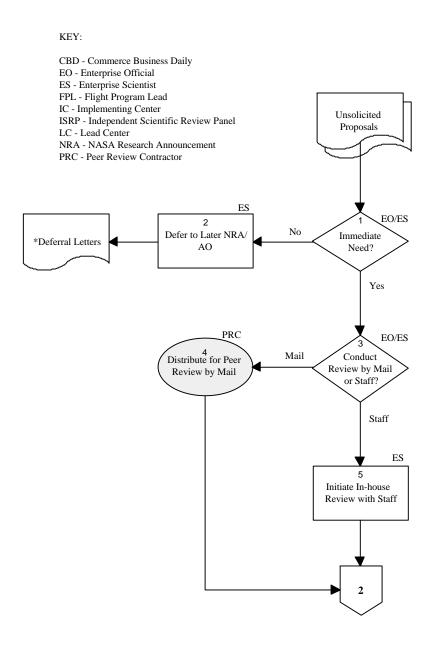
Subject: Research Solicitation, Evaluation, and Selection



Responsible Office: Office of Life and Microgravity Sciences and Applications

Subject: Research Solicitation, Evaluation, and Selection

5. Flowchart for Unsolicited Proposals



HOWI 8000-U003 February 1, 1999

Responsible Office: Office of Life and Microgravity Sciences and Applications

Subject: Research Solicitation, Evaluation, and Selection

6. **Procedure**

6.1 The process described in the following table consists of three phases: research solicitation, research evaluation, and research selection. The number at the left of the table refers to the flowchart step in Section 5.

Research Solicitation

#	Responsible Party	Activity Description	
1	Enterprise Scientist	Analyze enterprise strategic goals by reviewing NASA Strategic Plans and other documents.	
2	Enterprise Scientist	Using input from the scientific community during pre-NRA workshops, formulate the discipline science focus, direction, and critical questions or critical issues requiring NASA/OLMSA support to meet Human Exploration and Development of Space goals.	
3	Enterprise Scientist with Peer Review Contractor	Prepare draft NRA based on the formulation of science focus.	
4	Enterprise Scientist	Send draft copies of the NRA to the procurement office and to legal affairs for clearance.	
5	Enterprise Official (DD)	Is the NRA approved? If not, the NRA is returned to Step 3 for rework.	
6	Enterprise Official (DD for NRA)	The NRA is signed.	
7	Enterprise Official (DD)/Enterprise Scientist	Submit a notice in the Commerce Business Daily that an NRA will be released by NASA in 30 days.	
8	Peer Review Contractor	Place NRA on the WWW. Distribute notification of NRA posting via email and postcards to the NASA OLMSA mailing list.	

HOWI 8000-U003 February 1, 1999

Responsible Office: Office of Life and Microgravity Sciences and Applications

Subject: Research Solicitation, Evaluation, and Selection

Research Evaluation

#	Responsible Party	Activity Description	
9	Peer Review Contractor	Process proposals that are received by making copies for the Independent Scientific Review and Engineering Cost Management (ECM) Review Panels, filing copies for future review by NASA officials, and mailing proposal copies to all reviewers.	
10	Independent Scientific Review Panel	The peer review contractor organizes the Independent Scientific Review Panel. To ensure quality control of the process, an OLMSA Enterprise Employee attends the Independent Scientific Review Panel as an observer.	
11	Enterprise Official (DD)/Enterprise Scientist	Reviews the panel's evaluations and ratings for quality and consistency. Selects the level of performance in the scientific review and evaluation that is required for consideration of proposals to be funded.	
12	Enterprise Official (DD)/Enterprise Scientist	What are the results of the Independent Scientific Review Panel's evaluation? Proposals below the required evaluation level are categorized as rejections and are forwarded to Step 19 for notification of rejection.	
13	Enterprise Scientist	If proposer identifies the proposal as a flight proposal on his submission form, the Enterprise Scientist forwards the proposal and supporting materials to the Flight Program Lead.	
14	Flight Program Lead	Performs an Engineering Cost Management (ECM) Review. Informs the Enterprise Scientist of the results of the ECM.	
15	Enterprise Scientist	Analyze the budget impact of those proposals being considered for support by OLMSA with respect to NRA goals and objectives. Analyze the programmatic relevance of proposals being considered for support by OLMSA with respect to NRA goals and objectives.	

Research Selection

HOWI 8000-U003 February 1, 1999

Responsible Office: Office of Life and Microgravity Sciences and Applications

Subject: Research Solicitation, Evaluation, and Selection

#	Responsible Party	Activity Description
16	Enterprise Scientist	Prepare recommendation for Enterprise Selecting Official based on resource requirements and NASA strategic goals and objectives.
17	Enterprise Official (DD)	Proposals are selected or rejected based on NRA goals and objectives, scientific merit, budget evaluation, programmatic relevance, and for flight proposals, ECM evaluation. Proposals that are not selected are forwarded to Step 19 for notification of rejection.
18	Enterprise Official (AA)	Reviews all selections and rejections of proposals for Human Exploration and Development of Space.
19	Peer Review Contractor	Prepares selection and rejection letters for all proposals.
20	Enterprise Official (DD)	Signs selection or rejection letters.
21	Peer Review Contractor	Sends copies of letters to NASA grants office, Principal Investigator (PI), and the implementing field center.
22	Lead or Implementing Center	Issues grant or contract.

HOWI 8000-U003 February 1, 1999

Responsible Office: Office of Life and Microgravity Sciences and Applications

Subject: Research Solicitation, Evaluation, and Selection

6.2 There is a different procedure for processing unsolicited research proposals that are submitted without reference to a specific NRA, as shown in the following table. The procedures used to evaluate these unsolicited proposals is different than that used for unsolicited proposals. The number at the left of the table refers to the flowchart step in Section 5.

#	Responsible Party	Activity Description
1	Enterprise Official (DD)/Enterprise Scientist	When unsolicited proposals are received, it is determined whether there is an immediate need for the research being proposed.
2	Enterprise Scientist	If there is not an immediate need for the proposed research, then the proposer is notified that the proposal will be deferred to a later NRA.
3	Enterprise Official (DD)/Enterprise Scientist	If there is an immediate need for the proposed research, then a decision is made whether to conduct a review of the proposal by mailing the proposal to a peer review panel or to conduct an in-house staff review.
4	Peer Review Contractor	If this review is conducted through the mail, then the Peer Review Contractor organizes distribution of the proposals and evaluation material. The results of the peer review conducted by mail are returned to the process at Step 12 of Section 6.1 for review of the results.
5	Enterprise Scientist	After an in-house review is conducted, the evaluations are returned to the process at Step 12 of Section 6.1 for review of the results.

HOWI 8000-U003 February 1, 1999

Responsible Office: Office of Life and Microgravity Sciences and Applications

Subject: Research Solicitation, Evaluation, and Selection

7. Quality Records

Record Identification	Owner	Location	Retention	Media
				Electronic/
				Hard Copy
NRA Solicitation	Enterprise	NASA Web Site	5 Years	Electronic
	Official	(http://peer1.idi.usra.		
	O I I I I I I I I I I I I I I I I I I I	edu/peer_review/nra/		
		nra.html)		
Peer Review	Enterprise	Peer Review	3 Years	Hard Copy
Evaluation	Official	Contractor Facility	Or More	
Documents	O I I I I I I I I I I I I I I I I I I I	-		
Proposal Selection,	Enterprise	Peer Review	3 Years	Hard Copy
Rejection, and	Official	Contractor Facility	Or More	
Deferral Letters	<u> </u>			